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PETITION FOR EXEMPTION

SRP Bell 212 External Hoist Operations

Wegele Mark
Mark.Wegele@SRPnet.com

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Petition for Exemption

Hello,

I am writing this petition for temporary exemption under **14 CFR part 91.9 and 133.43** regarding our external hoist operations. Requirements are defined in SAIB: SW-18-15 and SAFO 18004 (External load devices for human external cargo). In the following paragraphs, I will be discussing the history of our helicopter hoist program, benefits to the public, safety considerations, the extent of relief we seek and the reason why, a summary, and supporting documentation.

Background

Salt River Project (SRP) is a utility company that is a primary power and water supplier to the Phoenix metropolitan area. We provide power to more than 1 million customers in a 2,900 square-mile service area. SRP operates and maintains about 2,417 miles of three-phase power lines at voltages from 69-500 kilovolts (kV).

To more efficiently maintain the electrical grid infostructure, Salt River Project started a flight department in 1978 with one Bell 206 Jet Ranger. Eventually, more aircraft were added over the years, including a 1980 Bell 212 HP. Then in 1995, under Aeronautical Accessories STC# SH3189SO (now part of Bell Helicopter), an external Goodrich hoist was installed. With the addition of the external hoist on the Bell 212, a hoisting to 500 kV structures program was established. The hoist allows us to lower linemen down onto the structures (as seen in the cover picture), where the lineman will unhook from the hoist and tie off onto the tower. The helicopter will continue down the line placing linemen on the tower structures until all the linemen (usually eight people) are on the structures. The linemen will then be climbing down the tower, and as they are coming down, they are inspecting and documenting any discrepancies at will need to be repaired. Once the linemen reach the ground, a vehicle will pick them up and take them to the helicopter awaiting in a predetermined LZ to take them onto the following sets of towers to inspect. This method saved the linemen from climbing up the towers and back down for inspections, reducing fatigue and increasing efficiency. With the hoist, the linemen only are required to climb down, thus allowing us to inspect upwards of 60-90 structures a day vs.10-15. The hoist enables us to cover hundreds of miles of transmission lines in a matter of a few weeks each year that we perform this inspection. We would never be able to maintain all these towers efficiently and safely if it wasn't for the hoist system. The external hoist is never used to perform any aerial maintenance while a person is suspended from the hoist.

In addition to the hoist being used to inspect the 500 kV structures, we also utilize it to insert/extract line crews in inaccessible mountainous terrain when they need to perform maintenance on SRP's power system.

Benefits to the Public

The external hoist allows us to keep the million-plus Phoenix metro area customers supplied with reliable power and water. Suppose we cannot perform these annual inspections. In that case, the chances increase of having power grid failures/blackouts, and that's not something we want to risk in the extreme summer temperatures of Arizona. Another possibility of failing to maintain these structures is the chance of tower failure in which the tower would collapse, and the energized line would contact the ground. If an energized line reaches the ground, it will most certainly cause a wildfire plus a power outage.

Safety Considerations

We have performed over 600 accident-free hoist operation cycles a year for the last 26 years. All Goodrich and Aeronautical Accessories ICAs are complied with in addition to the Bell Helicopter maintenance inspection/retirement schedules being followed. During these inspections, we have never found any airframe structural defects that are in question regarding the hoist as outlined in SAIB: SW-18-15 and SAFO 18004. Suppose we are granted a one-time exemption to utilize the hoist for our two weeks of inspections this fall. In that case, we will continue to maintain high maintenance standards of our aircraft and all associated equipment, including the external hoist. Based on our safety track record, this one-time exemption wouldn't adversely affect safety in any form or fashion.

Extent of Relief & Reason

We are seeking a one-time temporary exemption to perform the aforementioned 500 kV structure inspections in fall 2021 to ensure the integrity of our power system. The timeframe we are seeking exemption for is:

- September 1st-3rd (Line crew annual refresher hoist safety training)
- September 27th- October 8th (Inspection of tower structures)

There will be no other hoist operations outside of the timeframe mentioned above and no further requests for exemptions regarding this subject. For a long-term solution, we are plan to purchase and take delivery of an aircraft next year that meets the requirements as defined in SAIB: SW-18-15.

Summary

Salt River Projects (SRP) is seeking a one-time temporary exemption of 14 CFR part 91.9 and 133.43 regarding the use of an external hoist mounted on a Bell 212 HP helicopter. Requirements are defined in SAIB: SW-18-15 and SAFO 18004 (External load devices for human external cargo). This temporary exemption would only be required to perform critical power grid infrastructure inspections during the weeks of September 1st-3rd and September 27th-October 8th, 2021.

Supporting Documentation


SW-18-15.pdf


AA-95033.pdf


SAFO18004.pdf

Please feel free to contact me if you have any questions.

Respectfully,

Mark Wegele

Mark Wegele (A&P, IA)

Flight Service Manager

Salt River Project (SRP)

2601 E. Air Lane

Phoenix, AZ 85034

Mark.Wegele@Srpnet.com

480-540-3421 (cell)